Patent claims

1. Assay for identifying an agent that modulates the interaction of interleukin-23 and/or interleukin-12 with a corresponding receptor thereof comprising
   a) contacting interleukin-23 and/ or interleukin-12 with a corresponding interleukin receptor in the absence and in the presence of a candidate compound which is expected to modulate the interaction of said interleukin with said receptor for a sufficient period of time so that a complex between said interleukin and said receptor can be formed,
   b) optionally separating the complex from uncomplexed fractions,
   c) detecting the complex formed in step a),
   d) determining whether there is a difference in the amount of complex formed in case a candidate compound was absent or present in step a), and
   e) choosing a candidate compound where a difference is determined in step d) as an agent.

2. The assay of claim 1, wherein the receptor is the interleukin-23 p19 receptor and/or the interleukin-12 p40 receptor.

3. The assay of any one of claims 1 or 2, wherein the receptor is fused to an immunoglobulin or a fragment thereof.

4. The assay of any one of claims 1 to 3, wherein
   - the interleukin is interleukin-23,
   - the receptor is the interleukin-23 p19 receptor and/or the interleukin-12 p40 receptor.

5. Assay of any one of claims 1 to 3, wherein
   - the interleukin is interleukin-12,
   - the receptor is the interleukin-12 p40 receptor.

6. Kit for identifying an agent that modulates the interaction of interleukin-23 and/or interleukin-12 with a corresponding receptor comprising
   a) interleukin-23 and/or interleukin-12,
   b) the interleukin-23 p19 receptor and/or the interleukin-12 p40 receptor,

c) optionally detection means,

d) instructions for use of said kit, and

e) optionally a solid phase.

8. The kit of claim 7, wherein said detection means comprise a label bearing interleukin-12 antibody.

9. The kit of any one of claims 7 or 8, wherein the interleukin receptor is fused to an immunoglobulin or a fragment thereof.

10. An agent identified by an assay of any one of claims 1 to 5.

11. Use of an agent of claim 10 as a pharmaceutical.

12. Use of an agent of claim 10 for the manufacture of a medicament for the treatment of a disease selected from the group consisting of autoimmune related diseases, inflammatory diseases and infectious diseases.

13. Pharmaceutical composition comprising an agent of claim 10 beside at least one pharmaceutical excipient.

14. Use of the interleukin-23 p19 receptor and/or the interleukin-12 p40 receptor for identifying an agent that modulates the interaction of interleukin-23 with one of said receptors.

15. Method for determining whether a receptor is specific for interleukin-23 or interleukin-12 or both or none, comprising

a) providing a receptor,

b) contacting interleukin-23 with the receptor of step a) for a sufficient period of time so that a complex between said interleukin and said receptor can be formed,

c) contacting interleukin-12 with the receptor of step a) for a sufficient period of time so that a complex between said interleukin and said receptor can be formed,

d) optionally separating the complex formed in step b) and/or c) from uncomplexed fractions,

e) detecting the complex formed in step b) and/or in step c) with detection means,

f) determining whether the receptor is

- specific for interleukin-23, which is the case if
  a complex formation of step b) and
  no complex formation of step c) is detected, or
- specific for interleukin-12, which is the case if
  a complex formation of step c) and
  no complex formation of step b) is detected, or
- specific for both interleukin-23 and interleukin-12, which is the case if
  a complex formation of step b), and
  a complex formation of step c) is detected, or
- unspecific for interleukin-23 and interleukin-12, which is the case if
  no complex formation of step b), and
  no complex formation of step c) is detected.

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